

**In the Claims**

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2       **1.—34.** (Cancel)

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4       **35.** (New) A processor-readable medium comprising processor-  
5 executable instructions for generating a PPML (personalized print markup  
6 language) document and translating the PPML document into a PDF (portable  
7 document format) document, the processor-executable instructions comprising  
8 instructions for:

9           marking a first PDF document to create a PPML template, wherein portions  
10 of the first PDF document are marked to become variables in the PPML template  
11 and other portions of the first PDF document are marked to become a background  
12 in the PPML template;

13           populating the PPML template with content and data, wherein the content  
14 and data are put into locations within the PPML template associated with the  
15 portions of the first PDF document marked to become variable, thereby creating  
16 the PPML document;

17           parsing structures within the PPML document;

18           generating a PDF document tree;

19           populating the PDF document tree with objects identified when parsing the  
20 PPML document;

21           configuring a second PDF document according to the PDF document tree;

22       and

23           printing the second PDF document.  
24  
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1           **36.** (New) The processor-readable medium of claim 35, wherein  
2           populating the PDF document tree comprises instructions for:

3                 resolving tags found when parsing the PPML document referring to  
4                 external objects by un-marshalling the external objects and inserting them within  
5                 the PDF document tree.

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7           **37.** (New) The processor-readable medium of claim 35, wherein  
8           populating the PDF document tree comprises instructions for:

9                 interpreting the parsed structures from the PPML document for attachment  
10                 to locations on the PDF document tree.

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12           **38.** (New) The processor-readable medium of claim 35, wherein parsing  
13           structures within the PPML document comprises instructions for:

14                 parsing both background and variable structures within the PPML  
15                 document.

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17           **39.** (New) The processor-readable medium of claim 35, additionally  
18           comprising instructions for:

19                 assigning rules to govern operation of variables within the PPML template.

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21           **40.** (New) The processor-readable medium of claim 39, wherein the  
22           rules are configured as macros.



1           **41.** (New) The processor-readable medium of claim 35, wherein  
2 marking portions of the first PDF document to be variables comprises instructions  
3 for:

4           marking text regions for substitution of alternate text; and  
5           marking image regions for substitution of alternate images.

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7           **42.** (New) A computer implemented method for generating a PPML  
8 (personalized print markup language) document and translating the PPML  
9 document into a PDF (portable document format) document, the method  
10 comprising:

11           providing tools to allow a user to mark a first PDF document to create a  
12 PPML template, including tools to mark portions of the first PDF document to  
13 become variables in the PPML template and tools to mark other portions of the  
14 first PDF document to become a background in the PPML template;

15           merge the PPML template with content and data, wherein the content and  
16 data are put into locations within the PPML template associated with the portions  
17 of the first PDF document marked to become variable, thereby creating the PPML  
18 document;

19           parsing structures within the PPML document;

20           generating a PDF document tree populated with objects identified when  
21 parsing the PPML document;

22           configuring a second PDF document to include to the PDF document tree;

23 and

24           printing the second PDF document.  
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2       **43.**   (New) The method of claim 42, wherein generating a PDF document  
3 tree populated with objects identified when parsing the PPML document  
4 comprises:

5       resolving tags found when parsing the PPML document referring to  
6 external objects by un-marshalling the external objects and inserting them within  
7 the PDF document tree.

8  
9       **44.**   (New) The method of claim 42, wherein generating a PDF document  
10 tree populated with objects identified when parsing the PPML document  
11 comprises:

12       interpreting the parsed structures from the PPML document for attachment  
13 to locations on the PDF document tree.

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15       **45.**   (New) The method of claim 42, wherein parsing structures within  
16 the PPML document comprises:

17       parsing both background and variable structures within the PPML  
18 document.

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20       **46.**   (New) The method of claim 42, additionally comprising:

21       assigning rules to govern operation of variables within the PPML template.

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23       **47.**   (New) The method of claim 46, wherein the rules are configured as  
24 macros.



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2       **48.**   (New) The method of claim 1, wherein marking portions of the first  
3 PDF document to be variables comprises:

4           marking text regions for substitution of alternate text; and  
5           marking image regions for substitution of alternate images.

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7       **49.**   (New) A processor-readable medium comprising processor-  
8 executable instructions for generating a PPML (personalized print markup  
9 language) document and translating the PPML document into a PDF (portable  
10 document format) document, the processor-executable instructions comprising  
11 instructions for:

12           in response to user operation of marking tools, defining within a first PDF  
13 document portions of the first PDF document to become variables in a PPML  
14 template and other portions of the first PDF document to become a background in  
15 the PPML template;

16           merging the PPML template with text and image data, wherein the data are  
17 put into locations within the PPML template associated with the portions of the  
18 first PDF document marked to become variable, thereby creating the PPML  
19 document;

20           parsing structures within the PPML document;

21           generating a PDF document tree populated with objects identified when  
22 parsing the PPML document;

23           configuring a second PDF document according to the PDF document tree;

24           and  
25



1 printing the second PDF document.

2  
3 **50.** (New) The processor-readable medium of claim 49, wherein objects  
4 identified when parsing the PPML document are obtained by resolving tags found  
5 in the PPML document by referring to external objects and un-marshalling the  
6 external objects.

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8 **51.** (New) The processor-readable medium of claim 49, wherein parsing  
9 structures within the PPML document comprises instructions for:

10 parsing both background and variable structures within the PPML  
11 document.

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13 **52.** (New) The processor-readable medium of claim 49, additionally  
14 comprising instructions for:

15 assigning rules to govern operation of variables within the PPML template,  
16 wherein the rules are configured as macros.

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18 **53.** (New) The processor-readable medium of claim 49, wherein  
19 marking portions of the first PDF document to be variables comprises instructions  
20 for:

21 marking text regions for substitution of alternate text; and

22 marking image regions for substitution of alternate images.



1           **54.** (New) The processor-readable medium of claim 49, wherein the  
2 PPML template is configured according to instructions for:

3           combining one or more variable objects, a macro file containing rules to  
4 govern use of the one or more variable objects, and the background, thereby  
5 forming the PPML document.

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